

IN THE CLAIMS:

1-16 (cancelled)

17. (New) An oxidizing composition for keratin fibres, comprising, in a cosmetically acceptable medium:

- (a) at least one oxidizing agent which is hydrogen peroxide or a compound capable of producing hydrogen peroxide by hydrolysis, or a mixture thereof,
- (b) at least one copolymer based on acrylamido-2-methylpropanesulphonic acid and acrylamide, and
- (c) at least one polymer which is a crosslinked 2-acrylamido-2-methylpropanesulphonic acid homopolymer or amphiphilic copolymer comprising at least one sequence of 2-acrylamido-2-methylpropanesulphonic acid units and at least one unit comprising a hydrophobic portion.

18. (New) The composition according to claim 18, wherein the keratin fibres are human keratin fibre.

19. (New) The composition according to claim 18, wherein the keratin fibres are hair.

20. (New) The composition according to Claim 17, wherein the composition comprises:

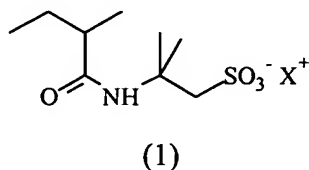
- (a) hydrogen peroxide,
- (b) at least one copolymer based on acrylamido-2-methylpropanesulphonic acid and acrylamide, and
- (c) at least one crosslinked 2-acrylamido-2-methylpropanesulphonic acid homopolymer.

21. (New) The composition according to Claim 17, wherein the composition comprises:

- (a) hydrogen peroxide,
- (b) at least one copolymer based on acrylamido-2-methylpropanesulphonic acid and acrylamide, and
- (c) at least one amphiphilic copolymer comprising at least one sequence of 2-acrylamido-2-methylpropanesulphonic acid units and at least one unit comprising a hydrophobic portion.

22. (New) The composition according to Claim 21, wherein the composition comprises, as the amphiphilic copolymer (c), a 2-acrylamido-2-methylpropanesulphonic acid/ethoxylated cetearyl methacrylate copolymer crosslinked with trimethylolpropane triacrylate.

23. (New) The composition according to Claim 20, wherein the crosslinked poly(2-acrylamido-2-methylpropanesulphonic acid) homopolymer (c) comprises, randomly distributed: from 90% to 99.9% by weight of units of formula (1) below:



in which X^+ denotes a cation or a mixture of cations, not more than 10 mol% of the cations optionally being protons H^+ ; and from 0.01% to 10% by weight of crosslinking units derived from at least one monomer containing at least two olefinic double bonds; the weight proportions being defined relative to the total weight of the polymer.

24. (New) The composition of claim 23, wherein the cation is an ammonium ion.

25. (New) The composition according to Claim 21, wherein the amphiphilic copolymer has a weight-average molecular weight ranging from 20,000 to 10,000,000.

26. (New) The composition of claim 25, wherein the amphiphilic copolymer has a weight-average molecular weight ranging from 50,000 to 8,000,000.

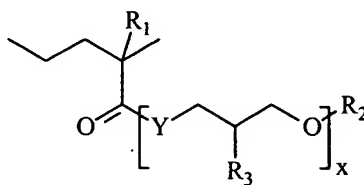
27. (New) The composition of claim 25, wherein the amphiphilic copolymer has a weight-average molecular weight ranging from 100,000 to 7,000,000.

28. (New) The composition according to claim 21, wherein the amphiphilic copolymer comprises at least one sequence of a monomer which is an ethylenically unsaturated hydrophobic monomer comprising at least one hydrophobic portion containing from 6 to 50 carbon atoms.

29. (New) The composition according to claim 28, wherein the hydrophobic portion contains 6 to 22 carbon atoms.

30. (New) The composition according to claim 28, wherein the hydrophobic portion contains 12 to 18 carbon atoms.

31. (New) The composition according to Claim 28, wherein the ethylenically unsaturated hydrophobic monomer is an acrylate or acrylamide of formula (2) below:



in which R_1 and R_3 , which may be identical or different, denote a hydrogen atom or a linear or branched C_1 - C_6 alkyl radical; Y denotes O or NH ; R_2 denotes a hydrophobic hydrocarbon-based radical containing from 6 to 50 carbon atoms; x denotes a number of moles of alkylene and ranges from 0 to 100.

32. (New) The composition according to claim 31, wherein the C_1 - C_6 alkyl radical is methyl.

33. (New) The composition according to claim 31, wherein the hydrophobic hydrocarbon-based radical contains from 6 to 22 carbon atoms.

34. (New) The composition according to claim 31, wherein the hydrophobic hydrocarbon-based radical contains from 6 to 18 carbon atoms.

35. (New) A process for the oxidation dyeing of keratin fibres, comprising applying to the keratin fibres:

(i) a dye composition comprising, in a support that is suitable for dyeing keratin fibres, at least one oxidation dye precursor, and

(ii) the oxidizing composition as defined in claim 17.

36. (New) The dyeing process according to claim 35, wherein:

(i) the dye composition is mixed, at the time of use, with the oxidizing composition,

(ii) the mixture obtained is then applied to the keratin fibres,

(iii) the mixture is left to act for approximately 3 to 50 minutes, and then

(iv) the keratin fibres are rinsed, washed with shampoo, rinsed again and finally dried.

37. (New) The process according to claim 36, wherein the mixture is left to act for approximately 5 to 30 minutes.

38. (New) The process according to Claim 36, wherein the dye composition and the oxidizing composition are sequentially applied to the keratin fibres, in any order, with or without intermediate rinsing.

39. (New) A process for treating keratin fibres in order to permanently reshape the fibres, comprising the following steps:

(i) applying a reducing composition to the keratin fibres, the keratin fibres being placed under mechanical tension before, during or after the application of the reducing composition,

(ii) optionally rinsing the keratin fibres,

(iii) applying the oxidizing composition of claims 17 to the optionally rinsed keratin fibres, and

(iv) rinsing the fibres treated with the oxidizing composition.

40. (New) The process of claim 39, wherein the fibres are human hair.

41. (New) The process of claim 39, wherein the fibres are reshaped in the form of permanent-waved hair.

42. (New) A process for bleaching or stripping keratin fibres, comprising the following steps:
applying the oxidizing composition of claim 17 to the keratin fibres, and

(ii) rinsing the fibres treated with the oxidizing composition.

43. (New) The process according to claim 42, wherein the keratin fibres are human hair.

44. (New) The process according to claim 42, wherein the keratin fibres are hair.

45. (New) A two-compartment device for dyeing keratin fibres, comprising a first compartment containing a dye composition and a second compartment containing the oxidizing composition of claim 17.

46. (New) The device according to claim 45, wherein the fibres are human keratin fibres.

47. (New) The device according to claim 45, wherein the fibres are hair.

48. (New) A two-compartment device for permanently reshaping keratin fibres, comprising a first compartment containing a composition comprising at least one reducing agent that is suitable for permanently reshaping keratin fibres and a second compartment containing the oxidizing composition of claim 17.

49. (New) The device according to claim 48, wherein the keratin fibres are human keratin fibres.

50. (New) The device according to claim 48, wherein the keratin fibres are hair.

51. (New) A two-compartment device for bleaching keratin fibres, comprising a first compartment containing an anhydrous powder or paste containing at least one persalt, and a second compartment containing the oxidizing composition of claim 17.

52. (New) The device according to claim 51, wherein the keratin fibres are human keratin fibres.

53. (New) The device according to claim 51, wherein the keratin fibres are hair.--